

Appendix H

Permit Requirements and Restrictions

Restrictions on Construction in Wetlands and Stream Channels on the Merced River Salmon Habitat Enhancement Project, Robinson Reach

The following is a partial list of permit conditions with which DFG and DWR had to comply, as defined by the various permits required for project construction. This list focuses on requirements most pertinent to on-going work in wetlands and stream channels.

California Department of Fish and Game Streambed Alteration (1601) Agreement:

- Page 7, Provision 12: "Fish passage facilities will be incorporated into any temporary barrier that obstructs fish passage."
- Page 7, Provision 13: "When any dam or artificial obstruction is being constructed, maintained, or placed in operation, sufficient water will at all times be allowed to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game code Section 5937."
- Page 8, Provision 17: "Vehicles may be driven in wet portions of the stream/lake to accomplish the work authorized by this Agreement. This work is only authorized when the vehicle is completely clean of petroleum residue and water levels are below the gear boxes of the equipment in use, or lubricants and fuel seals are sealed such that inundation by water will not result in leaks. Any mechanical equipment operated in the water will not be submerged to a point above any axle of said mechanical equipment. At no time will the main body of the excavator/backhoe enter water-covered portions of the stream, except as necessary to cross the stream and access the work site."
- Page 8, Provision 21: "Upon Department determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the project will be halted until the Department has determined the Operator has installed adequate control devices."

- Page 8, Provision 22: “The Operator will monitor in-stream turbidity levels during in-stream construction activities and will adhere to those specifications for turbidity set forth by the Regional Water Quality Control Board’s Conditional Waiver of Waste Discharge Requirements issued for this project.”
- Page 9, Item 28: “The disturbance or removal of vegetation will not exceed the minimum necessary to complete operations. Precautions will be taken to avoid other damage to vegetation by people or equipment”.

NMFS Concurrence with USFWS Biological Opinion

- Page 1, Item 1: “In-stream work must be conducted between June 1 and October 30. This will insure a time frame when salmonids would not be in the project area and avoid jeopardy to the threatened species.”
- Page 2, Item 4: “Before filling pond areas, remove and transport aquatic species from the fill site. This will reduce the likelihood of take of listed species during construction activities.”

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- General Condition 4: “Aquatic Life Movements. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activities primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.”

Mitigation and Avoidance Measures

The following is a partial list of mitigation and avoidance measures outlined in the CEQA/NEPA document entitled “Merced River Salmon Habitat Enhancement Project and Robinson Reach Phase Initial Study/Environmental Assessment.” Permits from regulatory agencies were granted based on the information provided in this document, including the mitigation and avoidance measures (Appendix J) that would be implemented. The following avoidance and mitigation measures are most pertinent to on-going work in wetlands and stream channels:

- Page 1, VW4: “All contractors and equipment operators will be given written and oral instructions to avoid impacts and be made aware of ecological values of the site.”

- Page 1, VW4: “A biological monitor will be available on site when needed. The monitor will check the site before construction for sensitive wildlife; assist in avoiding impacts to fish, wildlife, and habitats; determine the least damaging options for removal or transplantation of vegetation according to established protocols; and provide technical information.”
- Page 2, VW15: “Excavating, filling, and other earth moving will be done in a gradual manner to allow wildlife species to escape in advance of machinery and moving materials.”
- Page 2, FWQ2: “To greatest extent possible, in channel construction activities shall be isolated from free flowing waters of the Merced River. Flows shall be diverted to temporary channels prior to construction of newly restored channels. Flows will be gradually diverted to temporary channels, over a 24-hour period, to allow salmonids adequate time to voluntarily leave the active channel. Once flows have been fully diverted from the active channel, fish rescue operations shall immediately be conducted by qualified fishery biologists. All fish collected during the fish rescue shall be released unharmed downstream of the project area construction or at a location determined by the NMFS or CDFG.”
- Page 3, FWQ4: “Adequate fish passage conditions shall be maintained through the project area during implementation of rehabilitation activities.”
- Page 3, FWQ6: “If cofferdams are used, only screened pumps will be used to de-water the construction area. The channel will be re-watered incrementally to minimize turbidity and sedimentation.”
- Page 3, FWQ7: “Instream construction activities must be minimized to reduce sedimentation. Avoid construction during the rainy season or high flows to the degree possible.”
- Page 3, FWQ8: “Silt curtains, silt fences, settling basins, sandbags, check-dams, straw bales, and other erosion control devices will be used as necessary to minimize sediment impacts to waters. Turbidity will be monitored to meet exceedance thresholds established by project's water quality waiver agreement with the Regional Water Quality Control Board, as applicable.”